

## STATEMENT OF CONSIDERATIONS

### REQUEST BY CATERPILLAR, INC. (CATERPILLAR) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS TO INVENTIONS MADE UNDER COOPERATIVE AGREEMENT NUMBER DE-FC04-02AL67623, DOE WAIVER NO. W(A) 02-044.

The Petitioner, Caterpillar, has requested a waiver of all domestic and foreign patent rights to inventions that may be conceived or first actually reduced to practice in the course of Caterpillar's work under Cooperative Agreement Number DE-FC04-02AL67623 entitled "PEM Fuel Cell Power System on Ethanol" with the U.S. Department of Energy (DOE). In a subsequent submittal, Caterpillar has affirmatively excluded from their waiver request any inventions made by their subcontractors under this agreement – Nuvera Fuel Cells (Nuvera) and Williams Bio-Energy (attached).

The work to be done will be the design, development and manufacture of an improved, integrated 11 kWe (net) ethanol-fueled proton exchange membrane (PEM) power system. Subcontractors will perform long-term performance testing of the PEM power system. This work will hopefully greatly increase the efficiency and power derived from PEM fuel cells. Successful research and development under this agreement will lead to broader use of fuel cell technologies, which will result in better air quality and lowered dependence on unstable overseas oil supplies.

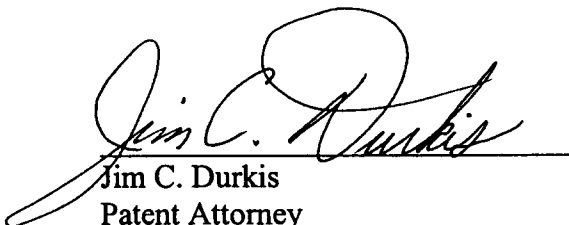
The cooperative agreement covers a period from May 1, 2001 through April 30, 2004 at a total cost to DOE of \$882,000. DOE funds to be provided as follows: FY01/02 -- \$400,000; FY03 -- \$442,000. Caterpillar and its partners will provide over \$1.6M as a cost share (64.7%) over the life of this agreement. The government contribution will be made through Budget & Reporting Code EE0502 sponsored by the Office of Advanced Automotive Technologies.

Caterpillar is a U.S.-based multinational corporation with a corporate presence in over 200 countries worldwide. Caterpillar is an acknowledged leader in distributed power systems and has decades of experience in power converter technology development. Caterpillar has a well-established global marketing base, thus allowing for swift, thorough and worldwide commercialization and implementation of any improved fuel cell technology that would be developed. Based on the dynamic nature of the technology itself, as well as the research and development being done in this field worldwide, it is not foreseen that the grant of this waiver would decrease competition, cause undesirable market concentration, nor place Caterpillar in a dominant market position. Caterpillar is utilizing two subcontractors under this agreement. One of the subcontractors is Nuvera, which is a multinational corporation dually headquartered in Cambridge, MA and Milan, Italy. Nuvera is owned by the Amerada Hess Corporation, a U.S.-based company headquartered in New York, NY. The other subcontractor is Williams Bio-Energy, a U.S. corporation based in Tulsa, OK.

Caterpillar has agreed to abide by 35 U.S.C. §§ 202, 203 and 204, as well as the provisions of the Standard Patent Rights clause for an Advance Waiver. Additionally, Caterpillar has agreed to the provisions of the attached U.S. Competitiveness Clause, which requires Petitioner to substantially manufacture any products embodying or produced through any waived invention in the United States, unless Petitioner can convince DOE it is not commercially feasible to do so. Petitioner agrees to make this condition binding on any assignee or licensee. Caterpillar will abide by the Export Control laws and will require its licensees, if any, to do the same. Caterpillar will expend such sums as may be required to maintain the necessary patent protection and provide incentive for commercial development of the invention. Additionally, Caterpillar has affirmatively agreed to the background data rights clause found in 48 CFR 952.227-14, Alternate VI (February 1998) (attached).

Considering Petitioner's status as a leader in the development, production and commercialization of power systems technology, it is concluded that the grant of the requested waiver is most likely to achieve commercialization success and actual implementation of this PEM power system technology on both a national and global scale.

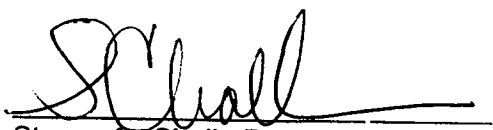
As such, upon evaluation of the Waiver Petition in view of the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver be granted.



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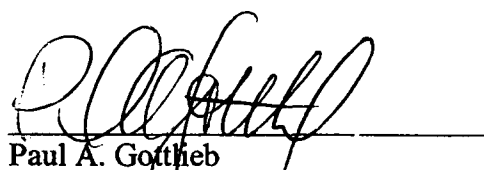
Based on the foregoing Statement of Considerations and the representations of the attached Waiver Petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above and, therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cooperative agreement where, through such modification or extension, the purpose, scope or DOE cost of the cooperative agreement have been substantially altered.

CONCURRENCE:

  
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Office of Hydrogen and Fuel Cells  
Infrastructure Technology Program  
EE-2H

Date: 6/3/03

APPROVAL:

  
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Date: 6-9-03

DOE Headquarters Project Manager: Nancy Garland